CITY PLANNING BOARD

Boston, Massachusetts

Technical staff assigned to project

S. F. Hodges, Senior Planner
Lloyd E. Sinclair, Planning Assistant
John J. Coughlin, Jr., Senior Engineering Aide (Draftsman)
Elliot Hansen, Senior Engineering Aide (Draftsman)

ACKNOWLEDGEMENTS

The inventory, for which the accompanying data and exhibits provide a brief summary, was undertaken as an indispensible step in the course of studies designed to serve, in part, in the eventual re-zoning of the City of Boston. This inventory (especially in so far as it applied to office buildings) could not have been carried to completion without the assistance of the following: the Building Owners and Managers Association of the Boston Real Estate Board, and many of their member firms; several scores of building managers and superintendents; the (U.S.) General Services Administration; and the (Mass.) Superintendent of Buildings. Their generous cooperation is, accordingly, herewith acknowledged with appreciation.

T.E.M.

CONTENTS

SUMMARY OF FINDINGS.

A. Volume, Use, and General Quality of Accommodations

1. Excluding residential accommodations and all basement space, inventoried building accommodations within the Survey Area (see Map A) add up to a total of 53 million sq ft of floor space gross. With 5 percent of this found to be vacant at the time of the inventory, occupied accommodations total just over 50 million sq ft gross.

2. Purposes for which these occupied accommodations were being used can be summarized as follows: (a) Office space accounts for 40 percent of the total, with the remainder being equally divided, for practical purposes, between two groups - (b) retail trade and consumer services, and (c) wholesale trade and manufacturing. More specifically -

a. Banking, insurance, and government account for over 40 percent of the 20 million gross sq ft of office space;

b. Accommodations occupied by retail trade and consumer service establishments total 14 million sq ft gross, nearly one-half of this being accounted for by the three most important types of establishments included - department stores, apparel shops, and hotels; and

c. Space given over to wholesale trade and manufacturing likewise comes to a total 14 million sq ft gross, with each of these two groups being more or less equally represented.

3. Quality of the total plant is suggested in a general way by the fact that only 30 million (or 60 percent) of the 50 million gross sq ft of occupied accommodations are in fireproof structures (as designated in the Sanborn Atlas). More significantly, however, it is to be seen (Chart I) that the ratio varies widely from one type of accommodation to another:

At one extreme, 85 percent of the occupied office space is in fireproof structures; and for consumer service establishments (hotels, theatres, and garages, for the most part), the ratio is 72 percent. On the other hand, fireproof accommodations account for little more than one-third of the space used for manufacturing (37 percent) and retail trade (35 percent); and for wholesale trade and storage warehouses, the ratio is only 21 percent.

4. Vacant space, as previously noted, represents 5 percent of the non-residential accommodations inventoried, or 2.7 million sq ft gross. The vacancy ratio varies significantly, however, by type of accommodation:

a. The vacant office space total of 700,000 sq ft represents only 3 percent of the accommodations of this type, whereas the ratio for the remainder is over 6 percent; and

b. Less than 2 percent of the accommodations in fireproof structures were found to be vacant, versus a ratio of 10 percent for accommodations in structures which are not fireproof.

B. Location and Density of Accommodations

1. Types of functional areas

Inventory results establish the fact that 74 percent of the 234 acres of net built-up area within the Survey Area is accounted for by blocks where one or another of the following four types of space-use predominates - office space, retail trade and consumer services, manufacturing, and wholesale trade:

a. The "office" blocks account for 29 percent;

b. The "retail" blocks account for 29 percent; and

c. The blocks where either wholesale trade or manufacturing is the predominant use account for 16 percent of the total.

It is furthermore to be noted (see Map A) that the location of these "office" blocks, "retail" blocks, etc, is such that, as a general rule, they form large contiguous areas.

Because of this significant grouping of related uses into distinct geographic areas, the following treatment of the location of accommodations within the Survey Area is expressed, for the most part, in terms of the "functional areas" where one or another of these four types of use is predominant. When appropriate, corresponding treatment will be given at the same time to the "mixed" blocks, which account for the remaining 26 percent of the net built-up area, and where no one type of use predominates.

2. Selected functional area characteristics

a. Most distinguishing feature in each case is the relative importance of the predominant use, varying as it does from one type of area to another (see Chart II):

i. Highest ratio of predominance is that for the three Office Areas, where office space accounts for an average 79 percent of all accommodations, with little variation between them;

ii. Of all accommodations in the four Retail Areas, space used by retail trade and consumer service establishments accounts for 68 percent of the total, although the composition of each represents a distinct departure from this average (see Chart III);

iii. Corresponding ratios for the two Manufacturing Areas (65 percent) and the two Wholesale Areas (61 percent) are still lower; and

iv. In the "mixed" blocks, taken together, no one type of use accounts for as much as one-fourth of the total.

2. Selected functional area characteristics (cont'd):

b. To a degree, functional areas may be distinguished from each other in terms of average structural density as well (for definitions, see Table 3), even though density varies from block to block within each area, sometimes significantly:

i. The "net building bulk density" for the Survey Area as a whole may be represented as an average of 5.3 gross sq ft of accommodations (excluding basements) for every sq ft of lot area.

ii. Higher-than-average densities are to be found for the most part in the Office Areas, for which the corresponding ratio is 6.2. For the Downtown Office Area I, in fact, the average is as high as 8.0, and for eight of the forty-five downtown "office" blocks, the ratio exceeds 10.0. In only ten cases does a downtown "office" block have a net density of less than 5.5, and one of these is the block including the State House, an exceptional case in more than one respect.

iii. For the remainder of the Survey Area, the picture is reversed: it is the exceptional "retail" block, or "manufacturing" block, or "mixed" block which has a structural density of as much as 6.2. For a majority of the blocks falling outside the Office Areas, the ratio is between 4.0 and 5.5.

c. The actual distribution of accommodations into functional areas is a direct reflection of the foregoing relationships:

i. With 18.4 million sq ft of accommodations, or 34 percent of the total plant, the Office Areas account for a higher proportion of accommodations than land area. And nearly three-fourths of all the office space in the Survey Area is located in the 68 acres (net) taken up by these three Office Areas.

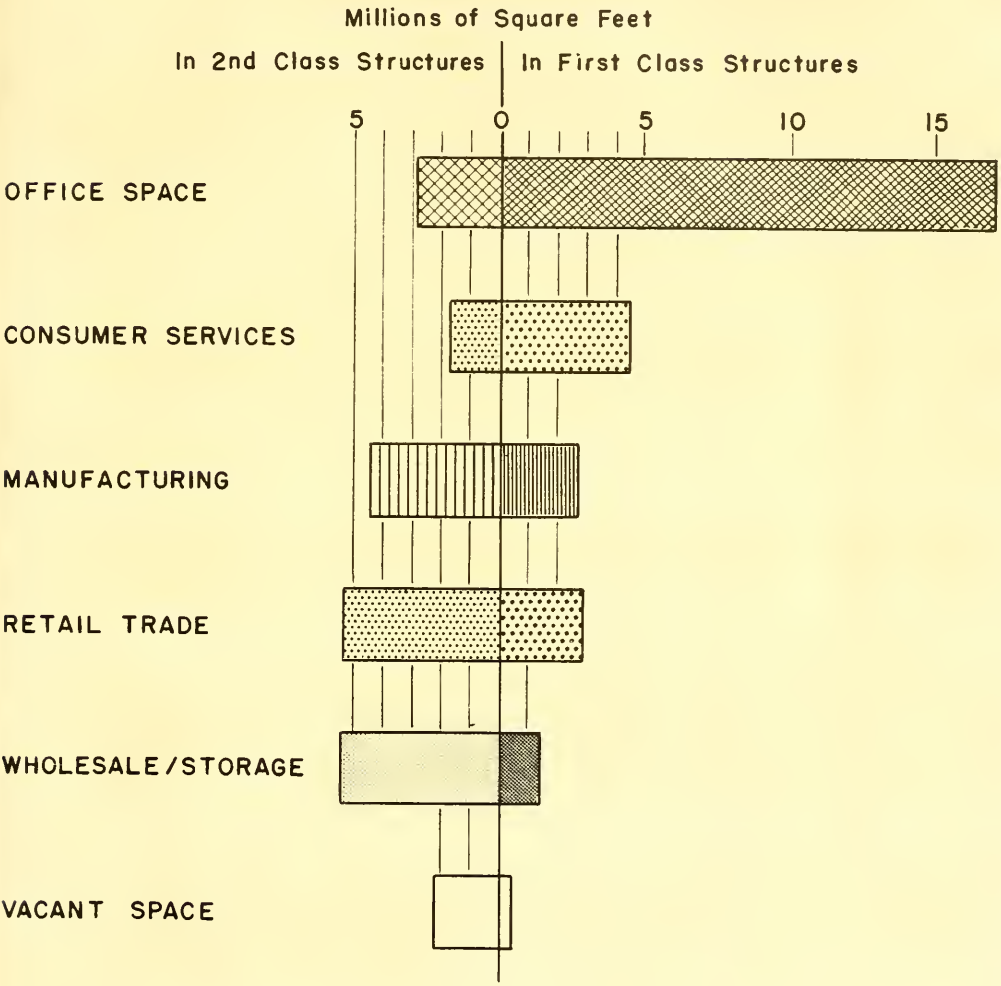
ii. Covering 67 acres (net), the four Retail Areas are nearly as extensive as the Office Areas. But with significantly lower structural densities as a rule, the Retail Areas account for only 28 percent of all inventoried space, or 15.1 million gross sq ft. Included in the total for Retail Areas, nevertheless, is 72 percent of all space used within the Survey Area by retail trade and consumer service establishments.

iii. By contrast, the Wholesale Areas and Manufacturing Areas are not only much less extensive, but are of less significance to the predominant uses concerned: Taken together, they cover only 38 acres net, and account for only 47 percent of all inventoried accommodations used by manufacturing and wholesale trade establishments.

iv. With the lowest average structural densities, the "mixed" blocks account for only 23 percent of all inventoried accommodations, even though their combined area of 61 acres (net) amounts to more than one-fourth of the Survey Area.

Chart I. DISTRIBUTION of GROSS ACCOMMODATIONS in BOSTON'S DOWNTOWN-BACK BAY BUSINESS DISTRICT (1) By Class of Construction Spring, 1953

FOR FIVE PRINCIPAL USE TYPES AND VACANT SPACE



1. See Map A

CITY PLANNING BOARD BOSTON, MASS.

Table 1a. DISTRIBUTION of GROSS ACCOMMODATIONS (occupied and vacant) and NUMBER of ESTABLISHMENTS, By type of use and by class of construction - For the Survey Area (1): Spring, 1953

Use Type	Occupancy, by class of construction (2)					
	All Structures		First Class		Second Class	
	# of estab	Gross accom(4)	# of estab(3)	Gross accom(4)	# of estab(3)	Gross accom(4)
Total Accom.		54,200		30,800		23,400
Residential		900		100		800
Total Non-Res.		53,300		30,700		22,600
Vacant(5)		2,700		500		2,200
Total Occupied	13,150	50,600	(7,700)	30,200	(5,450)	20,400
OFFICE SPACE	7,510	20,000	5,870	17,100	1,640	2,900
Banking	70	1,400	50	1,300	20	100
Insurance	280	3,600	220	3,200	60	400
Government (6)	--	3.300	--	3,100	--	200
Other	7,160	11,700	5,600	9,500	1,560	2,200
RETAIL TRADE	1,990	8,200	(600)	2,900	(1,390)	5,300
Gen. Merch.	13	2,000	(5)	900	(8)	1,100
Apparel	500	2,500	(170)	1,000	(330)	1,500
Furniture	170	1,200	(30)	400	(140)	800
Restaurant, etc.	450	1,100	90	200	360	900
Other	860	1,400	310	400	550	1,000
CONSUMER SERV.	1,130	6,100	(460)	4,400	(670)	1,700
Hotels	18	2,400	(11)	2,100	(7)	300
Amusements	50	1,400	(20)	1,000	(30)	400
Garages	13	1,000	12	1,000	1	Neg.
Other	1,050	1,300	420	300	630	1,000
WHOLESALE TRADE	1,210	6,100	320	1,200	890	4,900
WAREHOUSE STOR.	28	700	(3)	200	(25)	500
MANUFACTURING	1,190	7,100	400	2,600	790	4,500
PUBLIC UTIL.	16	800	13	700	3	100
INSTITUTIONAL	80	1,600	30	1,100	50	500

1. For footnotes, see over.

Table 1a. Footnotes:

1. For the extent of the area, see Map A. This area is taken to include all of the significant, contiguous, predominantly non-residential blocks of the Downtown-Back Bay business and industrial district, with the principal exception of the following: (a) the wharves (with 2,700,000 sq ft of accommodations - 60% of this second class construction, 60% given over to storage); and (b) North and South Stations and affiliated facilities (including nearly 600,000 sq ft of office space). Note, furthermore, that all land so far taken for the Central Artery also falls outside the Survey Area.

2. "First class" accommodations occupy buildings designated in the Sanborn Atlas as having "fire-proof construction." All other surveyed structures are included as "second class."

3. Actual counts as rounded to the nearest ten. Counts in parentheses include establishments occupying both types of structures. Note also that no establishment counts are included for government office space. (See Note 6, below.)

4. In thousands of sq ft. All totals exclude basement space, and are rounded to the nearest 100,000 sq ft. For the definition of "gross accommodations," see the General Notes following Table 4b.

5. Located vacancy falls into three main categories as follows: 700,000 sq ft of <u>office space</u> (about one-half in first class structures); 200,000 sq ft of <u>ground floor shop space</u> (all but a fraction of it in second class structures); and 1,800,000 sq ft of <u>loft space</u> (all but 140,000 sq ft in second class structures).

6. Government office space within the Survey Area is approximated as follows for the four principal categories: <u>Federal</u>: 1,300,000 sq ft (with an additional 200,000 sq ft in the U. S. Appraisers Stores and North Station office buildings); <u>State</u>: 1,100,000 sq ft (including MDC and MTA); <u>County</u>: 600,000 sq ft; and <u>City</u>: 300,000 sq ft. Establishment counts for government office space are not always practicable, and have therefore been omitted entirely.

Table 1b. GROSS ACCOMMODATION for the AVERAGE ESTABLISHMENT (1), By type of use and by class of construction - For the Survey Area: Spring, 1953

Use Type	All Structures		First Class		Second Class	
	# of estab	Gross accom per estab(3)	# of estab(2)	Gross accom per estab(3)	# of estab(2)	Gross accom per estab(3)
			Averages, by class of construction			
Total occupied(1)	13,144	3.3	(7,692)	3.1	(5,452)	3.6
OFFICE SPACE(1)	7,500	1.9	5,865	1.9	1,635	1.7
Banking	68	20.0	51	25.0	17	6.0
Insurance(1)	277	7.6	217	7.9	60	6.5
Other(1)	7,155	1.5	5,597	1.5	1,558	1.4
RETAIL TRADE(1)	1,994	3.4	(600)	3.2	(1,394)	3.5
Gen. Merch.(1)	12	72.0	4	60.0	8	78.0
Apparel(1)	493	4.1	(165)	(3.7)	(328)	(4.3)
Furniture, etc.	173	7.1	(28)	(13.6)	(145)	(5.9)
Restaurant, etc.	452	2.6	91	2.6	361	2.6
Other	864	1.7	312	1.5	552	1.8
CONSUMER SERV.	1,136	5.4	(465)	9.5	(671)	2.5
Hotels	18	132.0	(11)	(190.0)	(7)	(41.0)
Amusements	52	27.0	(20)	(50.0)	(32)	(13.0)
Garages	13	78.0	12	(83.0)	1	30.0
Other	1,053	1.2	422	0.8	631	1.5
WHOLESALE TRADE	1,206	5.1	321	3.9	885	5.5
WAREHOUSE STOR.	28	24.0	(3)	(73.0)	(25)	(18.0)
MANUFACTURING	1,185	6.0	399	6.6	786	5.7
PUBLIC UTIL.	16	52.0	13	59.0	3	20.0
INSTITUTIONAL	79	20.0	(26)	(41.0)	(53)	(9.0)

1. Excluding government office space, and the following exceptionally large establishments (with gross accommodation approximated, plus basement space)

   Office space: John Hancock and New England Mutual life insurance companies (1,500,000 sq ft); and New England Tel and Tel (four establishments), United Shoe Machinery, and Stone and Webster (1,200,000 sq ft.).

   Retail space: Jordan Marsh and Filene's (1,600,000 sq ft)

2. Actual counts. Those in parentheses include establishments occupying both types of structures.

3. In thousands of sq. ft. Averages in parentheses are less reliable owing to the circumstance cited in the previous note.

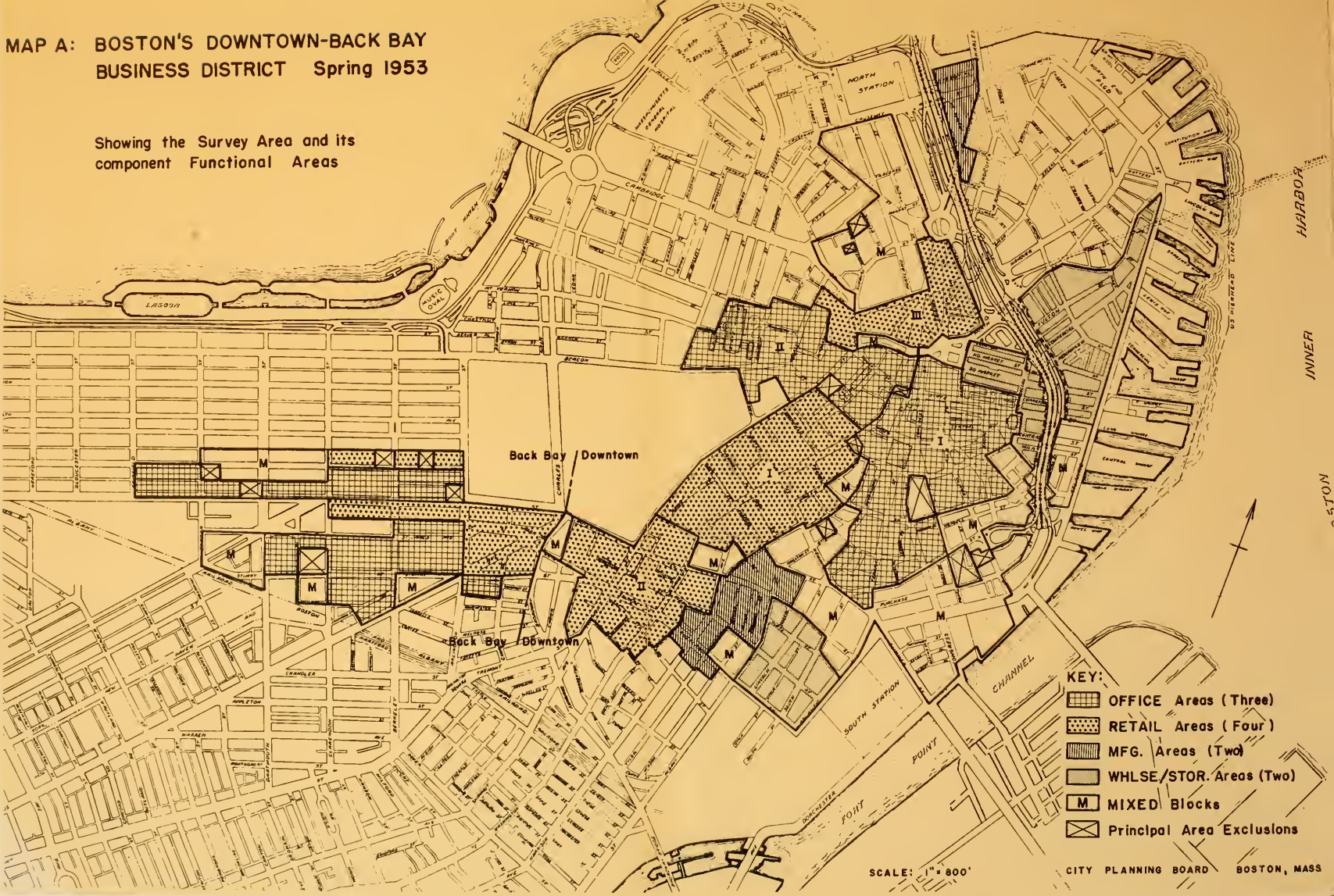

MAP A: BOSTON'S DOWNTOWN-BACK BAY BUSINESS DISTRICT Spring 1953
Showing the Survey Area and its component Functional Areas
Back Bay Downtown
Back Bay Downtown
NORTH STATION
SOUTH STATION
LAGOON
MUSIC OVAL
CHANNEL
POINT
FORT
INNER
HARBOR
KEY:
OFFICE Areas (Three)
RETAIL Areas (Four)
MFG. Areas (Two)
WHLSE./STOR. Areas (Two)
MIXED Blocks
Principal Area Exclusions
SCALE: 1" = 800'
CITY PLANNING BOARD BOSTON, MASS

Table 2a. DISTRIBUTION of GROSS ACCOMMODATIONS, By type of use, by sub-district, and by functional area: Spring, 1953

Use Type	Survey Area	Gross accommodations, by area(1) Sub-districts(2) Downtown	Back Bay	Functional Areas(3) Office Areas	Retail Areas	W/S & Mfg Areas	Mixed Blocks
Total Accom.	54,250	45,070	9,180	18,420	15,130	8,160	12,540
Residential	880	500	380	180	140	220	340
Total Non-Res.	53,370	44,570	8,800	18,240	14,990	7,940	12,200
Vacant	2,750	2,420	330	510	840	310	1,090
Total occupied	50,620	42,150	8,470	17,730	14,150	7,630	11,110
OFFICE SPACE	19,960	15,370	4,590	14,600	2,450	500	2,410
RETAIL TRADE	8,240	7,130	1,110	1,040	5,910	260	1,030
CONSUMER SERV.	6,120	4,210	1,910	600	4,370	70	1,080
WHOLESALE/STOR.	6,800	6,700	100	140	320	3,510	2,830
MANUFACTURING	7,120	7,040	80	370	750	3,130	2,870
PUBLIC UTIL.	830	740	90	290	60	130	350
INSTITUTIONAL	1,550	960	590	690	290	30	540

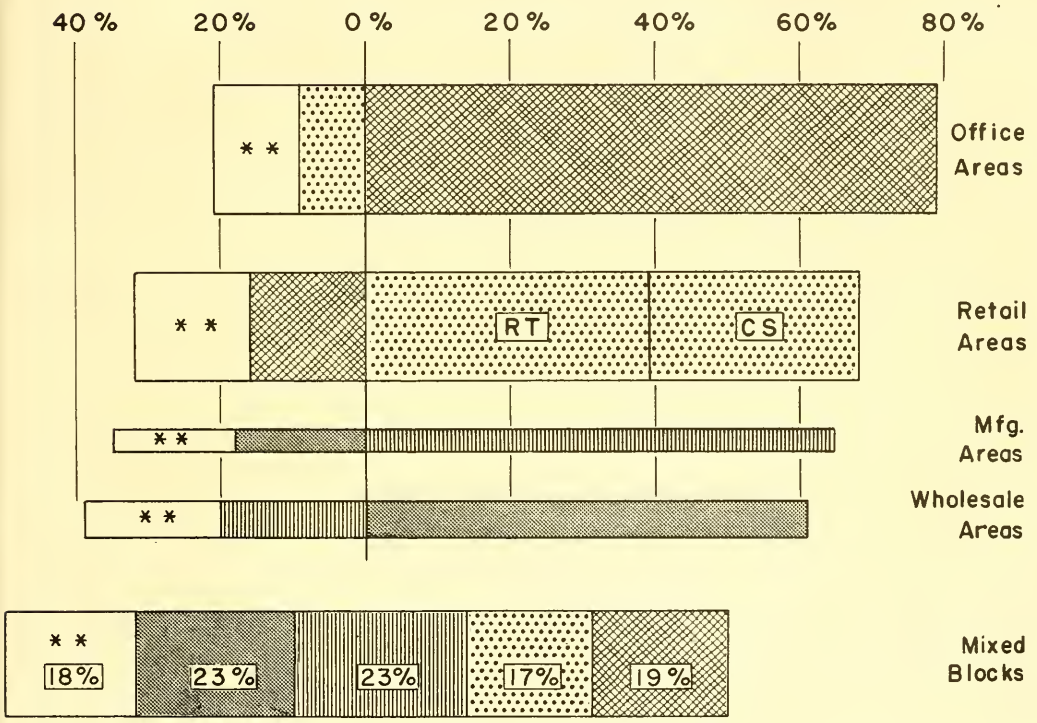
1. In thousands of sq ft, rounded to the nearest 10,000 sq ft; for all structures and establishments; excluding basement space.

2. For the boundary between sub-districts, see Map A.

3. For functional area locations, see Map A. For each of the first three types, the characteristic use is by far the predominant use (see also Table 2b), and, with few exceptions, the street blocks in each have the character of the functional areas to which they have been assigned. Within the mixed blocks, on the other hand, no one type of use accounts for as much as 50% of all accommodations, with one result being that no one type accounts for as much as one-fourth of the accommodations in all these mixed blocks (see Table 2b.).

Chart II. COMPOSITION of FUNCTIONAL AREAS in BOSTON'S DOWNTOWN-BACK BAY BUSINESS DISTRICT and Their Relative Importance Spring, 1953

Showing Predominance of the Distinguishing Uses (*), by Area (as Horizontal Percentages).



* Key

- Office Space
- Retail Trade and Consumer Serv.
- Manufacturing
- Wholesale Trade and Storage

* *

Represents uses not otherwise specified, including vacancy and residential space. For detail, see Table 2b. □ Width of bar represents volume of accommodations (0.5" equals 10 million square feet).

CITY PLANNING BOARD BOSTON, MASS.

Table 2b. COMPOSITION of FUNCTIONAL AREAS and SUB-DISTRICTS - Percent distribution of gross accommodations, by area: Spring, 1953

Use Type	Area percentages						
	Survey Area	Sub-districts		Functional Areas			
		Downtown	Back Bay	Office Areas	Retail Areas	W/S & Mfg Areas	Mixed Blocks
Total Accom.	100	100	100	100	100	100	100
Residential	3	1	4	1	1	3	3
Total Non-Res.	97	99	96	99	99	97	97
Vacant	5	5	4	3	6	4	8
Total occupied	92	94	92	96	93	93	89
OFFICE SPACE	37	34	50	79	16	6	19
RETAIL TRADE	15	16	12	6	39	3	8
CONSUMER SERV.	11	9	21	3	29	1	9
WHOLESALE/STOR.	12	15	1	1	2	43	23
MANUFACTURING	13	16	1	2	5	38	23
PUBLIC UTIL.	1	2	1	2	Neg.	2	3
INSTITUTIONAL	3	2	6	3	2	Neg.	4

Table 2c. AREA DISTRIBUTION of GROSS ACCOMMODATIONS - Percent distribution, by type of use: Spring, 1953

Use Type	Survey Area	Sub-districts		Functional Areas			
		Downtown	Back Bay	Office Areas	Retail Areas	W/S & Mfg Areas	Mixed Blocks
Total Accom.	100	83	17	34	28	15	23
Residential	100	57	43	20	16	25	39
Total Non-Res.	100	84	16	34	28	15	23
Vacant	100	88	12	19	31	11	39
Total occupied	100	83	17	35	29	15	21
OFFICE SPACE	100	77	23	73	12	3	12
RETAIL TRADE	100	87	13	13	72	3	12
CONSUMER SERV.	100	69	31	10	71	1	18
WHOLESALE/STOR.	100	99	1	2	5	52	41
MANUFACTURING	100	99	1	5	11	44	40
PUBLIC UTIL.	100	89	11	35	7	16	42
INSTITUTIONAL	100	62	38	45	20	Neg.	35

Table 3. SELECTED FUNCTIONAL AREA CHARACTERISTICS - Net and gross built-up areas and structural densities, and gross accommodations, by type of functional area and by sub-district: Spring, 1953

Functional Areas and Sub-districts	Built-up area(1) (in acres)		Structural densities(2)		Gross accom(3)
	Gross	Net	Gross	Net	
Survey Area	377	234	3.3	5.3	54,250
Downtown	303	190	3.4	5.4	45,070
Back Bay	74	44	2.9	4.8	9,180
OFFICE AREAS	107	68	3.9	6.2	18,420
Downtown	74	47	4.3	6.7	13,850
Back Bay	33	21	3.2	5.1	4,570
RETAIL AREAS	102	67	3.4	5.2	15,130
Downtown	80	54	3.5	5.1	12,120
Back Bay	22	13	3.1	5.5	3,010
W/S and MFG (Dt)	67	38	2.8	4.9	8,160
MIXED BLOCKS	101	61	2.9	4.7	12,540
Downtown	82	51	3.0	5.0	10,940
Back Bay	19	10	2.0	3.6	1,600

1. The "net" built-up area: the area of property holdings (as recorded in the Bromley Atlas) making up the street blocks within the Survey Area, with the following principal exceptions - (a) significant instances of open-space (parking space, for the most part, but also building sites, gas stations, cemeteries, etc); and (b) the sites of most churches and historic shrines within the Survey Area.

   The "gross" built-up area includes the following as well as the "net" area as described above: street area to the center line fronting on all the property included within the "net" area.

   Also excluded from both "net" and "gross" areas: (a) those blocks within the outside boundaries of the Survey Area which have no occupied structures at present (e.g. the block between Congress, Franklin, Pearl, and Milk); and (b) squares whose street area would be inappropriately assigned to fronting street blocks (e.g. Park Square).

   Altogether, the excluded areas amount to an additional 49 acres gross (31 acres net), of which parking space accounts for 30 acres gross (and 21 acres net).

2. For footnote, see over.

Table 3. Footnotes (cont'd)

2. The "net" structural density represents gross accommodations (excluding basement space) divided by the "net" built-up area; while "gross" structural density represents gross accommodations (excluding basement space) divided by the "gross" built-up area. These relationships may also be referred to as "building bulk ratios" (net and gross).

3. In thousands of sq ft, rounded to the nearest 10,000 sq ft; for all structures and establishments; excluding basement space.

Table 4a. SUMMARY for the OFFICE AREAS - Net and gross built-up areas and densities, and gross accommodations by type of use: Spring, 1953

	Selected data, by area				
	All Office Areas	Downtown Office Areas(1)			Back Bay Office Area
		Total	I	II	
Areas, in acres(2):					
Gross	107	74	46	28	33
Net	68	47	27	20	21
Densities (2):					
Gross	3.9	4.3	4.6	3.6	3.2
Net	6.2	6.7	8.0	5.0	5.1
Accommodations(3):					
Total	18,420	13,850	9,410	4,440	4,570
Residential	180	90	--	90	90
Total non-res.	18,240	13,760	9,410	4,350	4,480
Vacant	510	390	290	100	120
Total occupied	17,730	13,370	9,120	4,250	4,360
OFFICE SPACE	14,600	11,190	7,820	3,370	3,410
RETAIL TRADE	1,040	580	290	290	460
CONSUMER SERV.	600	480	180	300	120
WHOLESALE/STOR.	140	130	130	--	10
MANUFACTURING	370	340	250	90	30
PUBLIC UTIL.	290	200	200	--	90
INSTITUTIONAL	690	450	250	200	240

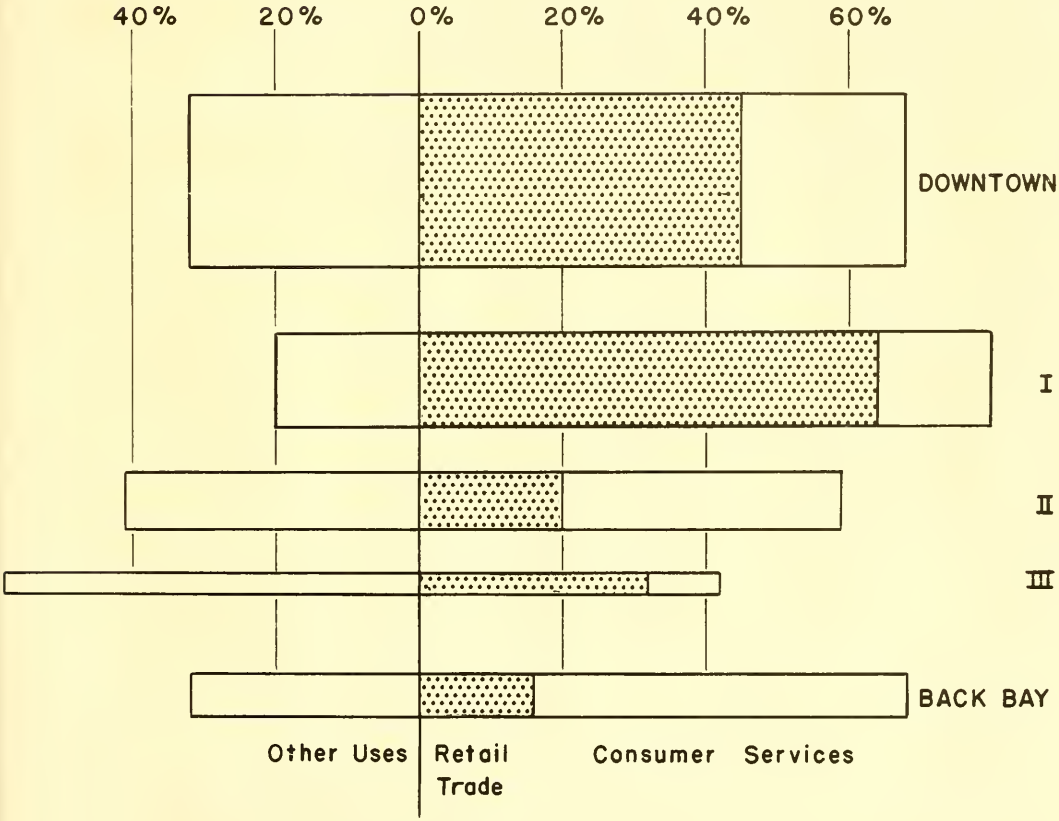
1. For the boundary between the two sections of the Downtown Office Area, see Map A.

2. For definitions, see footnotes 1 and 2 for Table 3.

3. In thousands of sq ft, rounded to the nearest 10,000 sq ft; for all structures and establishments; excluding basement space.

Chart III. COMPOSITION of RETAIL AREAS in BOSTON'S DOWNTOWN-BACK BAY BUSINESS DISTRICT and Their Relative Importance Spring, 1953

Showing the Predominance of Space in Retail Trade and Consumer Services, by Area (as horizontal percentages).



Note: Width of bar represents the volume of accommodations, by area (1" equals 10 million square feet along vertical axis).

CITY PLANNING BOARD BOSTON, MASS.

Table 4b. SUMMARY for the RETAIL AREAS - Net and gross built-up areas and densities, and gross accommodations by type of use: Spring, 1953

	Selected data, by area					
	All Retail Areas	Downtown Retail Areas(1)				Back Bay Retail Area
		Total	I	II	III	
Areas, in acres(2):						
Gross	102	80	38	27	15	22
Net	67	54	27	19	8	13
Densities (2):						
Gross	3.4	3.5	3.9	3.5	2.3	3.1
Net	5.2	5.1	5.5	5.1	3.8	5.5
Accommodations(3):						
Total	15,130	12,120	6,510	4,170	1,440	3,010
Residential	140	120	--	50	70	20
Total non-res.	14,990	12,000	6,510	4,120	1,370	2,990
Vacant	840	730	240	210	280	110
Total occupied	14,150	11,270	6,270	3,910	1,090	2,880
OFFICE SPACE	2,450	1,620	650	860	110	830
RETAIL TRADE	5,910	5,440	4,140	840	460	470
CONSUMER SERV.	4,370	2,800	1,010	1,640	150	1,570
WHOLESALE/STOR.	320	320	110	40	170	--
MANUFACTURING	750	750	230	320	200	--
PUBLIC UTIL.	60	60	--	60	--	--
INSTITUTIONAL	290	280	130	150	--	10

1. For the location of the three sections of the Downtown Retail Area, see Map A.

2. For definitions, see footnotes 1 and 2 for Table 3.

3. In thousands of sq ft., rounded to the nearest 10,000 sq ft; for all structures and establishments; excluding basement space.

GENERAL NOTES ON METHODS AND TERMS

A. Accommodations and number of establishments as inventoried

1. The basic inventory procedure was that which applied to all but the larger office buildings in multiple occupancy.

The principal steps involved:

a. The field survey, which was conducted to locate establishments within the structures inventoried, and to assign preliminary use classifications.

At this point, their location was expressed simply in terms of floors occupied of a given structure, in so far as this could be established by inspection and occasional inquiry. Structural vacancy was also located simultaneously, subject to the same reservations. This approach was carried through structure-by-structure for each of the street blocks of the Survey Area, office buildings excepted.

b. Application of the secondary sources necessary to convert the field reports into a reasonably accurate accounting of (i) floor space occupied (or vacant), (ii) the number of establishments involved, and (iii) function being served respectively.

The nature of the results:

Section B (below) treats the classification of space (and establishments) by type of use or function. The description of terms immediately following will, therefore, be concerned especially with the treatment of space occupied and the establishment counts:

a. "Space occupied" (whether developed for individual establishments or groups of related establishments) was approximated by multiplying (i) the area of building coverage at the ground level, by (ii) the number of floors used by the establishment(s) in question. The Bromley Atlas was the basic source on lot area; the field survey was the basic source on number of floors to be assigned (or fractions thereof); and adjustments reflecting structural irregularities were as scaled off in the Sanborn Atlas. Accordingly, the floor areas thus developed include wall space and everything within (hall space, stair wells, elevator shafts, etc, as well as the rentable or "net" space). For this reason, these areas have been referred to as "gross accommodations" throughout the accompanying summary tables and exhibits. The same procedures (and reservations) apply to inventoried vacant space.

A reasonably reliable basis for approximating "net" space for office buildings was established in the course of the inventory (see below). But since this has still not been established for a sufficient number of buildings of all types, no attempt has been made to convert the entire inventory into "net" as well as "gross."

GENERAL NOTES (cont'd):

For certain classes of buildings, the "gross accommodations" figures as developed include more than usable floor-space in another sense: a theatre with the main hall rising to a height of three stories, for example, was inventoried as a three-story structure. This usage was introduced in order that comparable, above-ground "building bulk (density) ratios" could be developed.

An effort was made to inventory the volume of basement space in use, but the overall results are too inconclusive to justify treatment in the accompanying summary. All basement space has, therefore, been excluded throughout, even though this type of accommodation is significant for certain types of functions (eg, banks, and most types of retail establishments).

b. When a given structure was occupied by more than one establishment, the basic source on number of establishments was Polk's Directory (1952), in so far as it was impracticable to account for this in the field. In counting establishments in such structures, frequent use was also made of the current telephone directory to insure the proper handling of establishments given more than one entry in the Directory.

2. The inventory of the larger office buildings in multiple use relied, understandably, less on inspection than on personal interview with managers and building superintendents.

Principal purpose of this approach was to obtain authoritive figures on current vacancy, if any, and to find out how much space was being used by banks, government agencies, and significant instances of non-office use, if any. Since the data on vacancy and selected types of occupants were ordinarily supplied in terms of "net" or rentable space occupied, the building's total "net" space was also obtained in most cases in order that "net" could be converted to a "gross" basis comparable with occupancy figures developed for other structures.

As a by-product of this approach, it can be said with some reliability that "net" or rentable space represents about 75 percent of "gross" for office buildings, and hence that rentable (or usable) office space (and vacant office space) is actually correspondingly less than the "gross accommodations" referred to elsewhere in the summary report.

Otherwise, however, the inventory of office buildings followed the basic procedure previously described: "gross accommodations" figures were derived with the use of Bromley and Sanborn; the number of establishments were as reported in Polk's Directory; etc.

3. Much of the government office space was located in the course of the inventory of office buildings as described above. As a cross check, however, and to fill out this aspect of the inventory, space-occupied data were also obtained from the two agencies responsible, respectively, for renting Federal and State office space in this area.

GENERAL NOTES (cont'd):

B. Classification of establishments by function, or type of space-use

1. As a general rule, establishments are classified in terms of their respective basic functions. All the space used by a retail furniture store, for example, is classified as "retail" even though much of its accommodation is given over to storage space. The distinction between types of space-use within a given establishment has been made only in exceptional instances (eg, the distinction between the office space and the exchange space within the New England Tel and Tel Building at 185 Franklin).

Polk's Directory and the current telephone directory were basic sources in assigning classification to establishments whose function was otherwise in doubt.

2. More specifically, the following notes are meant to clarify the make-up of the categories (as employed in Table 1) which may not be found self-explanatory:

OFFICE SPACE

Banking: Stock brokers, et al, have in most cases been treated as "Other" (office space).

Insurance: Reported accommodations are those of the larger establishments which either have their own building, or whose space could be reliably approximated without extensive inquiry. The establishment count is probably conservative, on other words, although it is not likely that the insurance space not separated from "Other" would add much relatively to the total specified.

Government: Includes approximations for public buildings as well as space rented in private buildings. Government service establishments such as post offices, fire stations, et al, are classified as "INSTITUTIONAL."

Other: Includes administrative, professional, and business offices other than the above. Among the more important sub-groups: lawyers, doctors, realtors, wholesalers without stocks (eg, wool brokers), accountants, manufacturers' agents and other types of sales representatives.

RETAIL TRADE (selected)

General merchandise: Department stores, and limited-price variety stores.

Furniture: Hardware and appliances stores, as well as stores specializing in furniture, floor coverings, etc.

Other: Food stores, drug stores, jewelry stores, and tobacco shops, among others.

GENERAL NOTES (cont'd):

CONSUMER SERVICES (selected)

Amusements: Theatres, for the most part, although bowling alleys, pool halls, and night clubs are also included.

Other: Beauty parlors, barber shops, dry cleaners, tailors, cobblers, radio (and other types of) repair shops, et al.

WHOLESALE TRADE

Establishments engaged in the actual physical storage and handling of goods in the performance of the wholesale function. Most of these are in produce and leather, although clothing, furniture, and jewelry are also important lines. Wholesalers without stocks on hand (eg, wool brokers) are generally treated as occupants of office space.

WAREHOUSE STORAGE

Generally restricted to establishments performing the storage function as such (eg, the Quincy Market Cold Storage Warehouses).

MANUFACTURING

Establishments actually engaged in manufacturing on the premises. Clothing, printing, and food products are the most important sub-groups. Manufacturers' agents are generally treated as occupying office space.

PUBLIC UTILITIES

Telephone exchanges and electric company substations, for the most part.

INSTITUTIONAL

Churches, government service establishments (eg, fire stations, post offices), and historic structures, for the most part, although many of these have been excluded from the inventory entirely. (See Map A.)

AUTHOR

CITY PLANNING BOARD

TITLE

DATE LOANED	BORROWER'S NAME

PROPERTY OF BRA LIBRARY